

Bulbophyllum maxillare (Orchidaceae) - A new record for India from Andaman & Nicobar Islands

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Abstract

Bulbophyllum maxillare (Lindl.) Rchb.f. from the Andaman and Nicobar Islands is first reported to the orchid flora of India. A brief description with illustration and photograph is provided for easy identification.

Keywords: Andaman & Nicobar Islands, *Bulbophyllum maxillare*, India, New Report, Orchidaceae

Introduction

Bulbophyllum Thouars is one of the largest genera of the family Orchidaceae. It comprises c. 1900 species distributed mainly in tropical areas of both Old and New World (Chen & Vermeulen, 2009). It is the second largest among the angiosperm genera in India, represented by c.100 species (Misra, 2007). So far, 13 species have been recorded in Andaman and Nicobar Islands. Among them, 5 species are confined to Nicobar Islands and 7 to Andaman Islands. One species, namely *B. clandestinum* Lindl. occurs in both the Islands.

During floristic explorations in Nicobar group of Islands, a few specimens belonging to the genus *Bulbophyllum* were collected from the adjoining areas of Galathea National Park. Based on critical study, the specimens were identified as *Bulbophyllum maxillare* (Lindl.) Rchb.f. A thorough scrutiny of literature (Kumar & Manilal, 1994; Sinha, 1999; Misra, 2007; Pandey & Diwakar, 2008; Karthigeyan *et al.*, 2010) revealed that this species was hitherto unrecorded from Andaman and Nicobar Islands and mainland India. Hence, in the present treatment the species is reported as new addition to the orchid flora of India. A brief description along with illustration and photograph is provided to facilitate easy recognition of this species in the field.

Bulbophyllum maxillare (Lindl.) Rchb.f., W.G. Walper's Ann. Bot. Syst. 6: 248. 1861; Cootes, Orch. Philip. 42. 2001. *Cirrhopetalum maxillare* Lindl., Edwards's Bot. Reg. 29: t. 49. 1843. *Bulbophyllum cuspidilingue* Rchb.f., W.G. Walper's Ann. Bot. Syst. 6: 264. 1861. *Cirrhopetalum blumei* Lindl., Gen. Sp. Orchid. Pl. 2: 676. 1891. *Bulbophyllum*

masdevalliaceum Kraenzl., Bot. Jahrb. Syst. 34: 251. 1904. *B. blumei* (Lindl.) J.J. Sm., Orch. Java 459. 1905; Holttum, Fl. Malaya 1: 403. 1953; Seidenf. & J.J. Wood, Orch. Penins. Malaysia & Singapore 517. 1992; J.B. Comber, Orch. Sumatra 775. 2001. *B. ephippium* Ridl., Mat. Fl. Malay. Penins. 1: 78. 1907.

Fig. 1, 2

Epiphytic herbs, upto 15 cm high. Rhizomes creeping, branched, c. 0.3 cm thick; pseudobulbs 4 cm apart, narrowly conical, 3.0 × 1.5–2.0 cm, oblique, 3–4-grooved. Leaves elliptic-lanceolate, up to 12 × 2.5 cm, rather thin, narrowed at base, acute at apex; petiole c. 1 cm long. Inflorescence arising from the base of the bulb, slender, up to 9 cm long, 1-flowered; bracts tubular, oblique, c. 5 mm long, acute at apex. Flowers c. 4 cm long, reddish with yellow margins; pedicel with ovary c. 1.5 cm long. Dorsal sepal ovate-lanceolate, c. 2.5 × 0.4 cm, erect,



Fig. 1. *Bulbophyllum maxillare* (Lindl.) Rchb.f.

narrowed to a slender tip, edges finely white-fringed towards base, blade red. Lateral sepals ovate-lanceolate with long narrow tips, c. 3.5×0.5 cm, spreading, pointing downward, tips free, lower half suffused with deep wine red, upper half and edges yellowish white, tips bright yellow. Petals ovate-lanceolate, falcate, acute, c. 0.5×0.2 cm, hooded over the column at their base, slightly curved down to slender tips. Lip slender, c. 0.6×0.2 cm, curved above the fleshy base and narrowed to a slender tip, dark red-brown. Column c. 2 mm long; foot curved, c. 2 mm long; stelidia 2, falcate, c. 0.7 mm long. Pollinia 4 in two clumps. Capsule not seen.

Flowering: November – December.

Habitat: Rare in inland evergreen forests, growing along with *Bulbophyllum clandestinum* Lindl. and *B. macranthum* Lindl. on the branches of small trees at an elevation of about 75 m.

Distribution: West Malaysia to Queensland (Malaysia, Singapore, Indonesia, Sumatra, Java,

Philippines, Borneo, Sulawesi, New Guinea, Solomon Islands, Australia) and now in India.

Specimens examined: INDIA, **Andaman & Nicobar Islands**, Great Nicobar Island, 16 km on East-West Road, 25.11.2011, Joju P. Alappatt 379 (PBL).

Notes: *Bulbophyllum maxillare* belongs to the section *Ephippium* Schltr. It is closely related to *B. restrepia* (Ridl.) Ridl., another species of this section recently reported from these islands (Joju, 2011). *B. maxillare* is easily distinguished from *B. restrepia* in having lateral sepals with free tips (joined in *B. restrepia*) and a long dark red-brown lip with an apically prolonged tail (short, strongly recurved, yellowish green lip without tail in *B. restrepia*).

Key to species of *Bulbophyllum* in Great Nicobar Island

1. Pseudobulbs very small, < 0.5 cm long or inconspicuous 2
1. Pseudobulbs well developed, > 1 cm long 3
2. Leaves > 10 cm long with distinct petioles; flowers many on a spike **B. apodum**
2. Leaves < 3 cm long, without distinct petioles; flowers solitary, borne directly on the rhizome **B. clandestinum**
3. Inflorescence many-flowered 4
3. Inflorescence 1-flowered 5
4. Inflorescence spicate; flowers dense, more than 6 in a spike **B. longibracteatum**
4. Inflorescence sub-umbellate; flowers lax, 5 or 6 in a cluster **B. bakhuizenii**
5. Lateral sepals more or less equal to dorsal sepal **B. macranthum**
5. Lateral sepals much longer than dorsal sepal...6
6. Lateral sepals free at tips; lip with an apically prolonged tail **B. maxillare**
6. Lateral sepals joined at tips; lip without a prolonged tail **B. restrepia**

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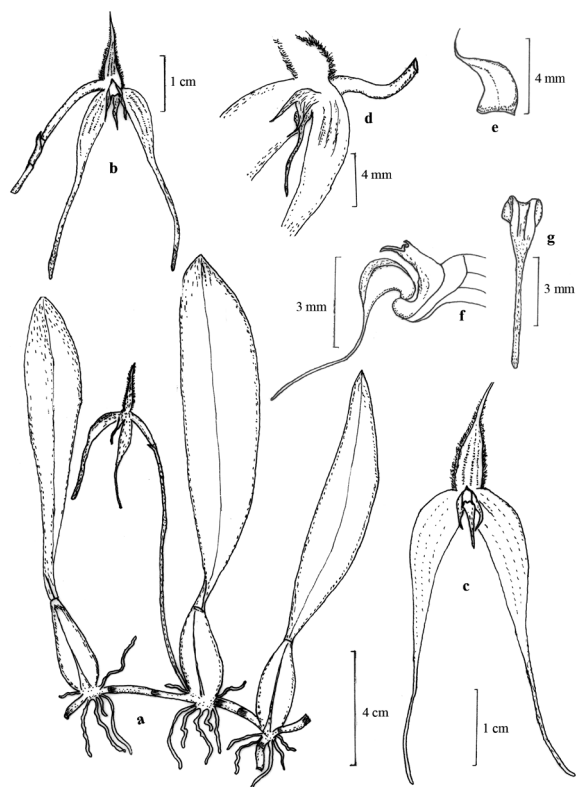


Fig. 2. *Bulbophyllum maxillare* (Lindl.) Rchb.f.: **a.** Habit; **b.** Flower; **c & d.** Flower (front & lateral views); **e.** Petal; **f.** Column & Lip (lateral view); **g.** Lip (front view).

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